

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P475142

Luminaire Tested: **22CZ2-44-HRP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475142
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44-HRP-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, SMOOTH LENS W/ HRP INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

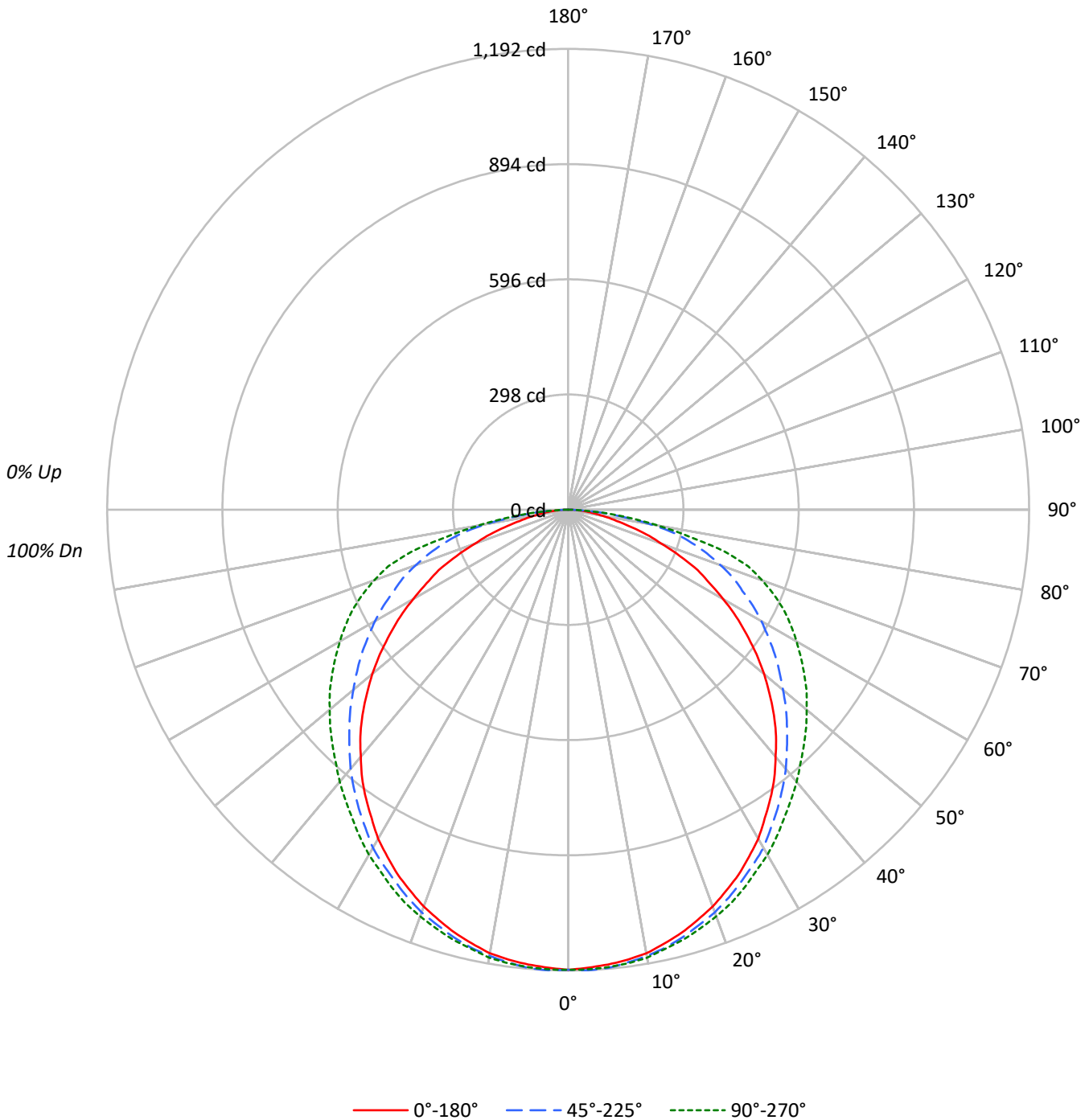
Lumens per Lamp: N/A
Luminaire Lumens: 3614.4 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.29 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	108	103	98	94	105	101	96	93	96	93	90		92	90	87		89	87	84	82
2	98	89	82	76	95	87	80	75	84	78	73		80	75	71		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51		62	56	51		60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		50	43	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	25		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3203	3203	3203
5°	3190	3215	3209
10°	3184	3202	3215
15°	3157	3189	3208
20°	3128	3173	3206
25°	3094	3148	3202
30°	3053	3138	3202
35°	2996	3101	3198
40°	2931	3075	3228
45°	2863	3046	3280
50°	2768	3036	3369
55°	2642	3060	3498
60°	2491	3104	3669
65°	2352	3165	3920
70°	2009	3301	4198
75°	1683	3438	4362
80°	1379	3321	3639
85°	1195	2464	2674



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	3.1
10°-20°	322.7	8.9
20°-30°	489.0	13.5
30°-40°	590.5	16.3
40°-50°	620.4	17.2
50°-60°	583.8	16.2
60°-70°	486.7	13.5
70°-80°	322.5	8.9
80°-90°	86.0	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	924.5	25.6
0°-40°	1514.9	41.9
0°-60°	2719.1	75.2
0°-90°	3614.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3614.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1190	1190	1190	1190	1190	
5°	1181	1183	1190	1190	1188	112
15°	1133	1138	1145	1149	1151	320
25°	1042	1049	1060	1074	1078	480
35°	912	921	944	964	974	570
45°	752	764	800	841	862	579
55°	563	588	652	718	746	504
65°	369	401	497	579	616	359
75°	162	226	331	399	420	176
85°	39	59	80	87	87	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1190.1	1190.1	1190.1	1190.1	1190.1
2.5°	1185.7	1187.9	1192.5	1192.5	1190.1
5°	1181.0	1183.2	1190.1	1190.1	1187.9
7.5°	1174.2	1176.6	1181.0	1185.7	1183.2
10°	1165.1	1167.3	1172.0	1176.6	1176.6
12.5°	1149.2	1151.4	1160.5	1162.9	1162.9
15°	1133.1	1137.7	1144.6	1149.2	1151.4
17.5°	1112.8	1117.2	1126.2	1135.5	1135.5
20°	1092.2	1096.6	1108.1	1117.2	1119.4
22.5°	1067.0	1073.9	1085.4	1096.6	1101.3
25°	1042.1	1048.9	1060.2	1073.9	1078.5
27.5°	1012.2	1019.1	1035.2	1051.1	1053.3
30°	982.6	989.5	1010.0	1023.7	1030.6
32.5°	946.2	955.2	975.8	996.3	1003.2
35°	911.9	921.2	944.0	964.5	973.6
37.5°	875.5	884.6	909.7	934.9	946.2
40°	834.4	845.9	875.5	902.9	918.8
42.5°	795.7	807.2	836.8	873.3	889.2
45°	752.4	763.7	800.4	841.3	861.8
47.5°	706.7	720.4	763.7	814.1	834.4
50°	661.2	677.1	725.1	782.1	804.8
52.5°	613.3	633.8	688.6	750.2	777.4
55°	563.1	588.3	652.2	718.2	745.6
57.5°	515.2	538.2	613.3	684.0	713.6
60°	462.8	492.4	576.8	649.7	681.8
62.5°	412.7	444.7	538.2	615.7	649.7
65°	369.4	401.2	497.1	579.0	615.7
67.5°	312.4	355.7	462.8	540.4	576.8
70°	255.4	314.6	419.5	499.3	533.5
72.5°	212.1	269.1	376.2	456.0	488.0
75°	161.9	225.8	330.7	399.0	419.5
77.5°	120.8	186.9	282.8	317.0	319.2
80°	89.0	143.6	214.3	225.8	234.8
82.5°	61.6	100.3	139.2	152.7	157.3
85°	38.7	59.2	79.8	86.6	86.6
87.5°	20.5	22.8	27.4	27.4	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)